

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: INVUE

Report Number: P367266

Luminaire Tested: **MSA-SA2B-727-U-SL3**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P367266  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA2B-727-U-SL3  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

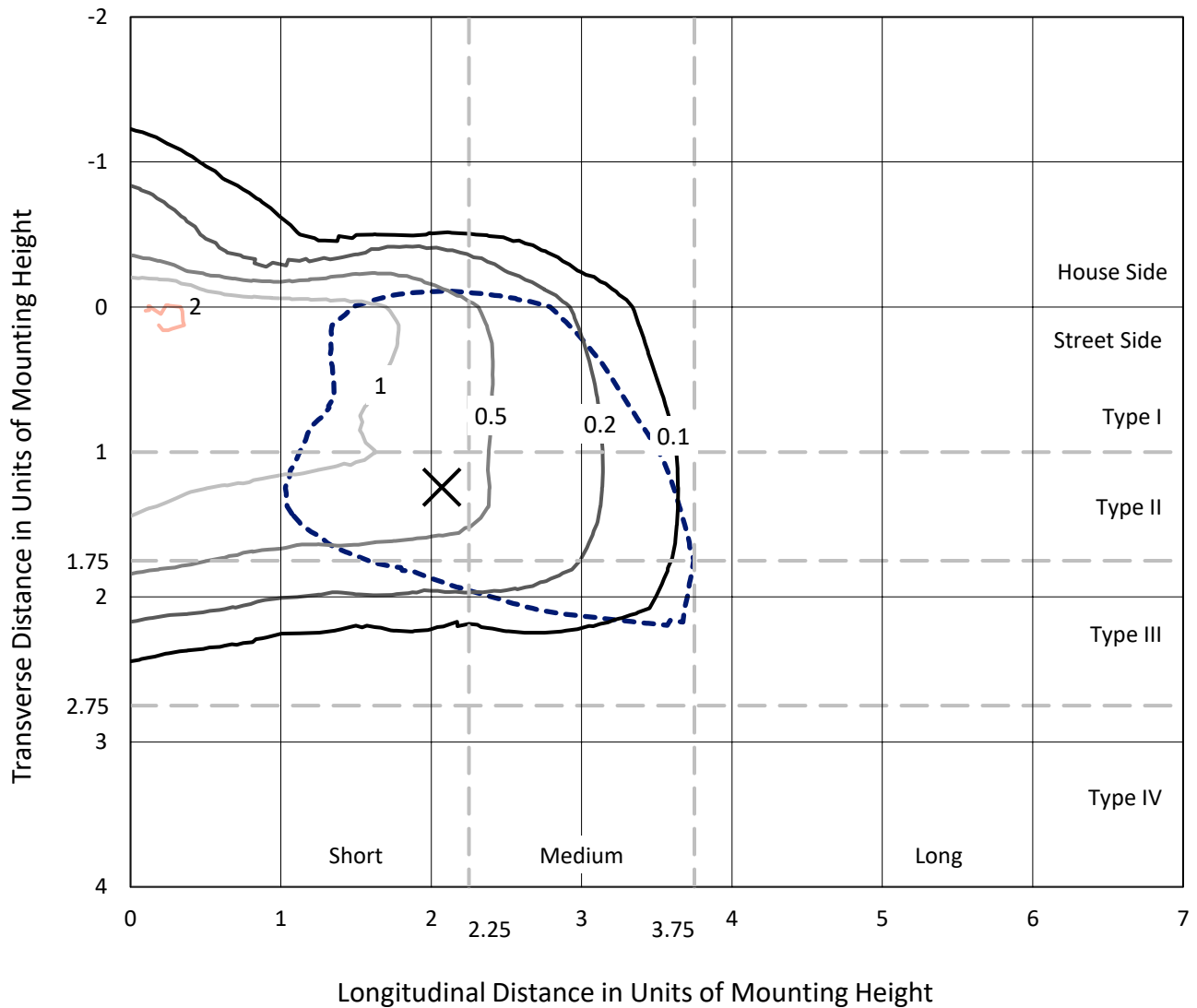
Lumens per Lamp: N/A  
Luminaire Lumens: 8174 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P367266  
 CATALOG NUMBER: MSA-SA2B-727-U-SL3

### Iso-Footcandle Lines of Horizontal Illumination

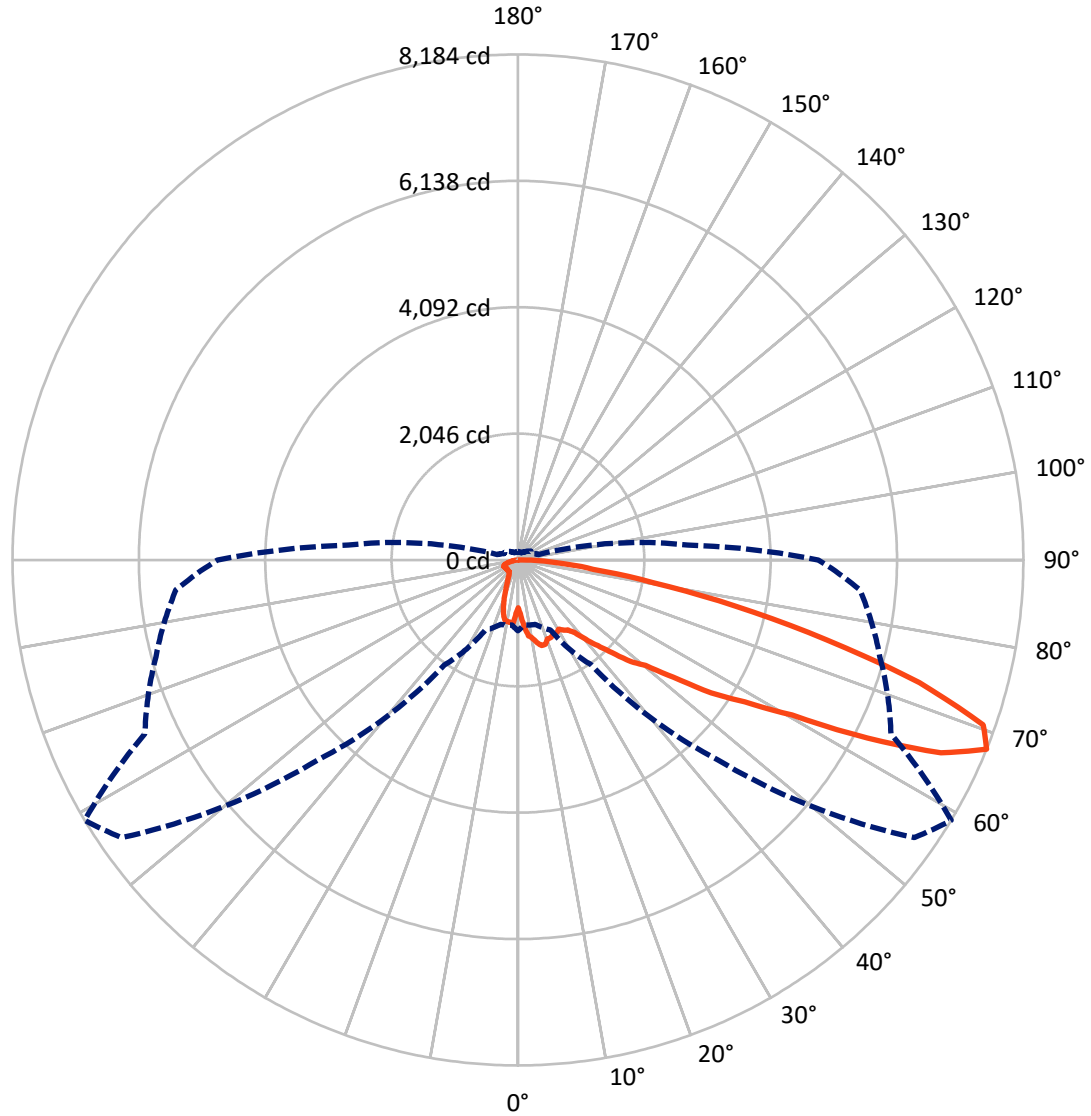
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P367266  
CATALOG NUMBER: MSA-SA2B-727-U-SL3

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P367266

CATALOG NUMBER: MSA-SA2B-727-U-SL3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1230.4	0.0	1230.4
	% Fixture	15.1	0.0	15.1
<b>Street Side</b>	Lumens	6943.6	0.0	6943.6
	% Fixture	84.9	0.0	84.9
<b>Total</b>	Lumens	8174.0	0.0	8174.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.0	1.2
10°-20°	298.9	3.7
20°-30°	426.9	5.2
30°-40°	629.1	7.7
40°-50°	1062.8	13.0
50°-60°	1849.6	22.6
60°-70°	2356.9	28.8
70°-80°	1248.0	15.3
80°-90°	200.8	2.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	8174.0	100.0
0°-180°	8174.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P367266

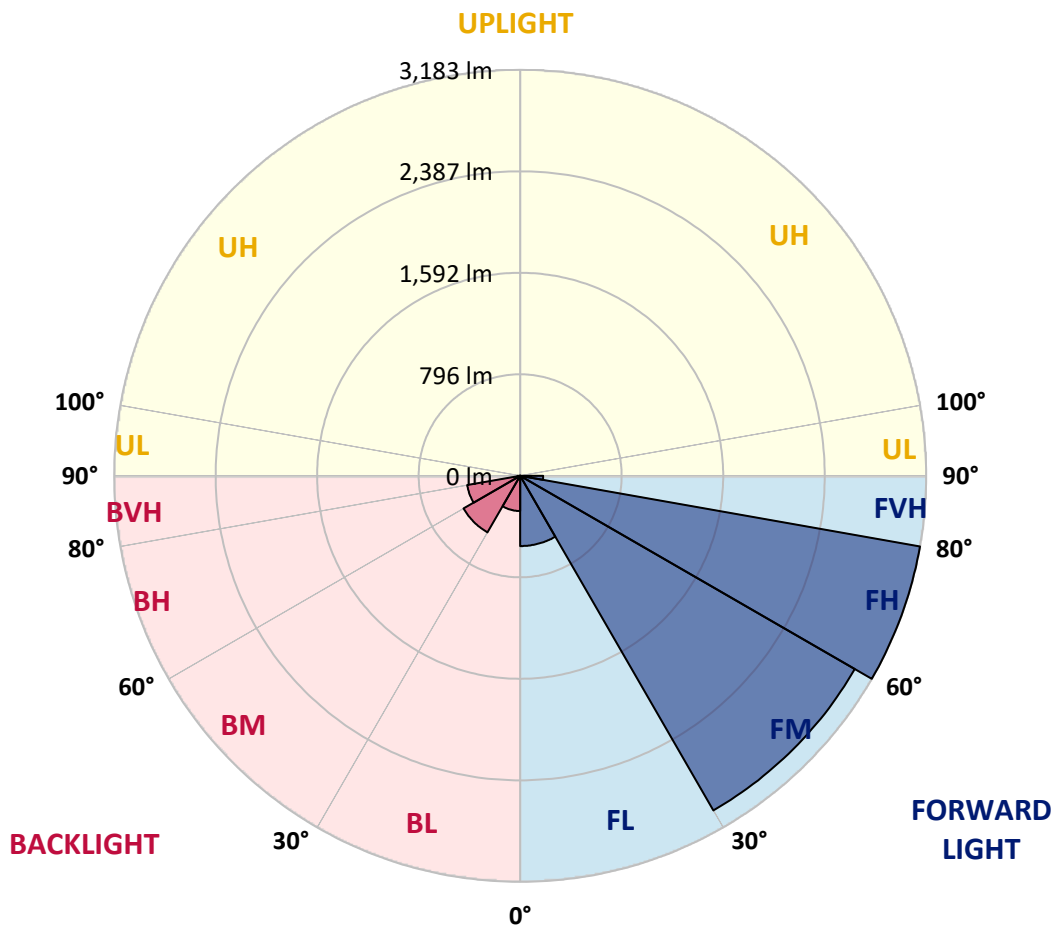
CATALOG NUMBER: MSA-SA2B-727-U-SL3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	550.9	6.7			
FM (30°-60°)	3029.2	37.1			
FH (60°-80°)	3183.2	38.9			G2/5000
FVH (80°-90°)	180.3	2.2			G2/225
BL (0°-30°)	275.9	3.4	B1/500		
BM (30°-60°)	512.3	6.3	B1/1000		
BH (60°-80°)	421.7	5.2	B1/500		G1/500
BVH (80°-90°)	20.4	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





REPORT NUMBER: P367266

CATALOG NUMBER: MSA-SA2B-727-U-SL3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5
2.5°	965.7	920.7	872.9	886.4	913.8	926.2	912.7	899.6	882.6	862.5	931.1
5°	1171.1	1104.3	1094.6	1094.2	1084.5	1045.7	1095.6	1092.1	1112.2	1133.0	1186.4
7.5°	1229.7	1204.7	1177.7	1190.5	1141.7	1139.6	1217.2	1239.4	1278.2	1265.3	1337.0
10°	1199.5	1171.5	1185.7	1180.5	1185.0	1236.2	1283.7	1285.1	1326.7	1367.5	1321.5
12.5°	1146.5	1148.6	1205.1	1203.0	1275.7	1371.0	1385.2	1374.1	1442.0	1414.3	1453.8
15°	1184.3	1209.6	1195.4	1207.5	1236.2	1357.5	1397.0	1437.1	1501.6	1526.5	1487.0
17.5°	1244.6	1258.1	1194.3	1187.8	1247.0	1304.5	1402.5	1436.8	1446.8	1624.5	1568.8
20°	1218.9	1246.3	1183.9	1103.9	1202.3	1278.5	1375.1	1364.8	1413.6	1632.2	1585.7
22.5°	1291.7	1246.3	1167.0	1110.2	1144.8	1214.8	1296.9	1365.1	1422.9	1587.5	1610.3
25°	1305.5	1284.0	1209.9	1153.5	1141.7	1166.6	1283.7	1328.4	1426.1	1648.4	1597.2
27.5°	1390.0	1357.8	1206.8	1208.5	1150.0	1106.0	1242.1	1336.0	1461.4	1610.7	1629.4
30°	1495.0	1470.4	1280.9	1287.9	1206.8	1125.7	1270.5	1298.9	1481.8	1669.6	1669.9
32.5°	1573.6	1616.9	1426.8	1332.5	1303.8	1243.2	1226.9	1354.7	1457.9	1776.3	1739.2
35°	1715.3	1748.9	1539.0	1463.5	1366.1	1297.9	1345.4	1391.4	1557.3	1916.5	1842.1
37.5°	1977.5	1938.7	1747.5	1628.7	1592.3	1494.0	1520.3	1488.1	1665.4	2074.1	2043.7
40°	2129.2	2095.6	1894.4	1828.6	1684.5	1696.9	1664.0	1687.6	1809.9	2241.8	2232.1
42.5°	2278.9	2233.8	2063.8	2018.0	1874.3	1813.3	1819.2	1895.4	2032.6	2512.7	2480.5
45°	2426.8	2311.4	2236.9	2249.1	2179.8	2054.8	2063.4	2135.1	2275.7	2822.3	2748.2
47.5°	2540.0	2444.8	2386.6	2371.7	2337.4	2504.7	2429.9	2459.0	2521.0	3098.1	3070.0
50°	2754.4	2643.3	2567.4	2545.9	2662.3	2895.1	2742.7	2680.0	2811.9	3454.5	3439.9
52.5°	3097.7	2959.2	2832.7	2831.3	2999.7	3150.7	3258.1	3150.0	3198.5	3819.6	3861.1
55°	3397.3	3237.0	3123.3	3186.0	3425.7	3518.2	3883.0	3798.4	3757.6	4188.1	4306.9
57.5°	3509.2	3321.8	3247.7	3340.2	3693.5	4168.7	4554.3	4331.9	4292.0	4605.2	4854.2
60°	3263.6	3065.5	3070.0	3244.2	3856.3	4646.4	5288.2	5099.5	4866.0	5124.4	5367.6
62.5°	2563.9	2384.9	2501.6	2766.6	3719.8	5110.6	6272.0	6351.6	5521.7	5555.0	5652.3
65°	1742.7	1618.7	1724.0	1983.4	3017.0	5363.8	7208.9	7528.3	6118.9	5836.9	5775.3
67.5°	1146.9	1059.2	1079.7	1252.2	2076.9	4572.6	7835.6	8183.7	6664.8	6068.3	5558.4
70°	888.1	817.5	808.5	898.9	1231.7	3176.7	7464.2	7993.5	6997.3	5851.5	4844.9
72.5°	696.9	643.2	648.1	735.0	953.9	1762.4	5776.0	6797.4	6496.4	5046.5	3722.2
75°	543.5	499.5	524.1	623.5	882.2	1095.3	3985.2	5159.0	5022.6	3736.8	2123.0
77.5°	394.5	366.1	401.1	531.0	829.2	939.7	2480.8	3599.3	3217.6	1918.6	728.4
80°	258.7	242.8	271.6	433.0	752.0	904.4	1533.1	2205.4	1589.9	539.0	275.7
82.5°	152.4	145.5	169.4	293.0	604.4	847.6	1022.5	1225.5	650.5	227.9	146.5
85°	80.0	74.8	100.5	168.3	416.7	773.8	805.0	733.6	314.2	99.1	70.0
87.5°	26.7	26.0	42.6	65.1	157.6	410.8	429.5	348.5	129.5	28.7	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P367266  
 CATALOG NUMBER: MSA-SA2B-727-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5
2.5°	940.4	926.6	846.9	858.0	868.4	863.2	860.1	824.0	820.6	871.8	867.7
5°	1185.0	1127.5	1059.6	1056.5	1011.8	966.1	975.1	960.5	964.7	985.8	987.9
7.5°	1314.2	1242.5	1177.7	1072.4	983.0	910.6	922.1	918.6	909.3	957.1	969.9
10°	1311.8	1248.0	1174.9	1047.5	987.2	928.3	857.6	790.8	771.1	747.5	749.6
12.5°	1398.4	1341.9	1182.6	1052.7	970.9	869.4	737.1	664.0	594.0	592.7	575.0
15°	1425.4	1383.8	1198.8	1022.9	857.0	711.5	574.7	495.3	444.8	434.7	419.8
17.5°	1493.6	1428.5	1149.3	926.6	724.6	556.3	431.9	376.5	372.4	379.3	371.7
20°	1498.1	1392.5	1059.9	784.2	582.3	421.5	352.3	324.6	339.5	356.4	355.7
22.5°	1494.3	1347.1	982.7	663.0	437.5	338.8	308.6	302.4	316.2	341.5	344.7
25°	1455.5	1332.2	886.1	544.5	355.0	290.3	282.0	285.8	303.1	332.9	332.9
27.5°	1496.0	1271.6	764.8	443.0	298.6	258.4	264.3	274.0	286.8	320.8	327.0
30°	1482.9	1291.7	667.1	356.8	263.3	236.2	249.4	259.1	273.6	309.0	312.1
32.5°	1518.2	1238.0	585.0	300.0	240.0	227.6	230.7	243.9	262.9	290.6	296.2
35°	1572.2	1257.7	490.8	269.8	228.6	217.5	223.4	233.8	252.9	279.9	284.4
37.5°	1744.7	1256.7	425.7	253.2	226.5	215.5	218.2	225.5	247.7	272.3	282.6
40°	1855.6	1328.7	366.5	249.4	224.1	214.4	212.0	220.0	237.6	266.7	274.0
42.5°	2063.8	1372.7	340.8	248.0	223.8	208.5	206.1	215.5	232.8	259.8	270.9
45°	2283.7	1435.4	320.4	247.3	222.7	207.5	200.2	212.0	226.5	252.5	265.3
47.5°	2542.5	1568.1	309.0	244.9	220.6	208.9	198.1	204.0	220.3	246.3	259.1
50°	2881.2	1743.7	311.4	241.4	223.8	209.2	195.0	197.8	212.7	238.0	251.1
52.5°	3293.1	2015.6	327.0	242.8	225.8	207.5	193.6	192.2	205.1	227.2	240.4
55°	3789.4	2401.5	373.7	249.4	225.8	207.1	191.6	185.3	195.0	213.0	225.8
57.5°	4388.3	2848.3	465.2	252.5	224.1	205.1	187.0	176.0	181.9	196.7	208.9
60°	4902.7	3208.9	559.4	254.6	227.6	200.2	178.0	164.2	168.0	179.4	190.2
62.5°	5164.9	3310.0	587.8	252.9	236.9	197.1	167.3	151.7	152.1	161.8	171.5
65°	5214.1	3175.3	473.9	251.1	249.1	196.7	159.7	141.0	138.6	145.5	153.8
67.5°	4863.6	2756.2	341.9	247.3	250.4	194.7	154.5	132.3	126.1	130.9	137.9
70°	4129.6	2219.6	287.2	239.7	233.8	184.3	145.5	123.3	115.0	118.5	123.7
72.5°	3078.7	1642.2	250.4	223.4	203.7	157.6	131.6	113.3	104.6	107.0	110.8
75°	1710.4	876.0	209.6	194.3	166.3	127.5	112.2	100.5	92.8	93.9	98.0
77.5°	568.1	323.2	153.8	154.1	125.7	98.4	92.5	85.9	80.0	80.4	83.8
80°	257.4	178.7	110.2	110.8	87.6	71.4	71.0	68.9	65.1	64.1	66.5
82.5°	149.3	108.4	75.5	72.0	56.5	46.4	51.6	50.6	49.5	45.7	46.4
85°	73.4	58.2	39.5	37.4	31.2	23.2	27.7	28.7	27.7	23.6	23.2
87.5°	18.0	19.1	9.7	9.0	5.2	2.4	4.2	4.2	5.2	3.5	1.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)